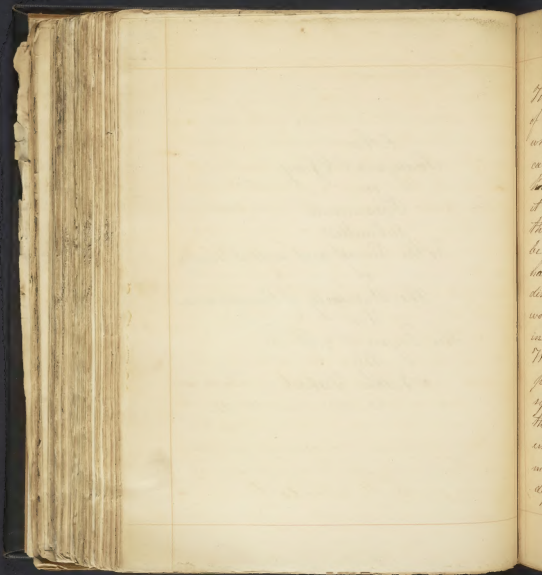


October 29th

V 74 Mill St

An
Inaugural Essay
on
Pneumonia
Submitted
To the Provest and medical Faculty
of
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For
The Degree of M. D.
By
Nathan Turner

admitted March 5th 1822



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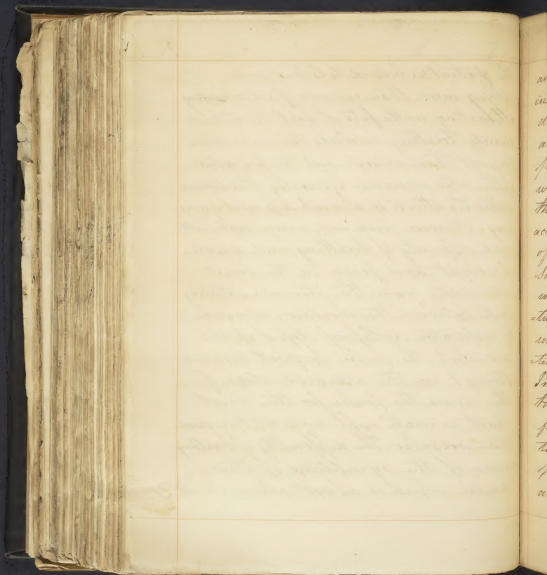
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Pneumonia.

This is an inflammation affecting some of the viscera of the thorax, or the membrane which lines the interior surface of that cavity: when it attacks the pleura, it is known by the name of pleuritis & when it has taken place in the substance of the lungs peripneumonia. There may be some difference between the two: but we have no symptoms by which we can distinguish them: and if there were it would be of no importance, since the treatment in both cases is precisely the same.

Whether inflammation be seated in the pleura, or in the lungs, it is known by the same symptoms viz First a sense of uneasiness about the thorax, and a cough so slight as to be entirely overlooked, or regarded as nothing more than such as in a greater or less degree frequently attends fevers, and

The patient is believed to labour under nothing more than common fever, shivering alternating with fits of heat, thirst and anxiety, breathing hurried; the pulse more frequent than natural, and the temperature of the skin increased. Generally this disease makes its attack in a much less ambiguous way. A severe pain and a dry cough, with much difficulty of breathing, and a sense of weight and pain in the breast immediately under the sternum, extending back between the shoulders, increased by inspiration; restlessness, loss of appetite and sleep, the pulse frequent hard and strong & in the advanced stage of the disease, the pulse for the most part is weak soft and at the same time irregular. The difficulty of breathing is one of the symptoms of this disease which is almost always present



and is found to be most considerable in inspiration, increasing as the disease advances; it is often short and frequent the violence of the pain preventing a full inspiration, where the pain is either dull, or absent, the breathing is oppressed and laborious, accompanied with anxiety and a sense of weight about the præcordia.

Sometimes the pain is much greater when the patient is in some particular posture. It is said to be greatest when he lies on the side affected, sometimes the reverse of this takes place.

In many cases the easiest position for the patient is on his back, and frequently the erect posture is found to be the one which the patient prefers. Cough another attendant and very distressing symptom of this

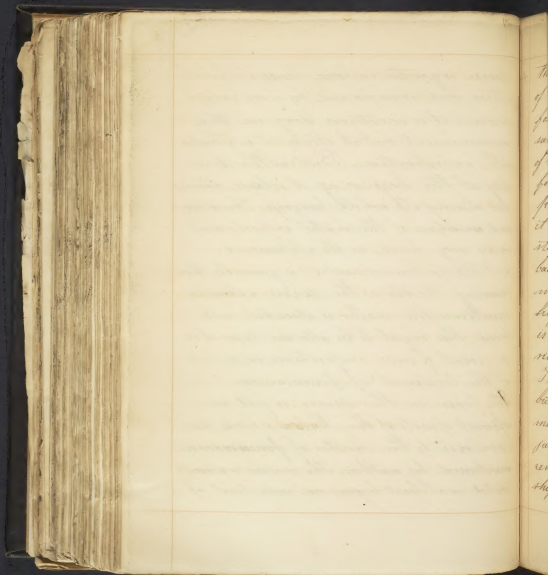
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disease is greater in some persons than others, and accompanied by more or less pain. it is sometimes dry in the commencement, but at others it is attended with expectoration. But altho it is dry at the beginning, it seldom continues so during its whole progress. The colour and consistence of the matter expectorated varies very much in its appearance.

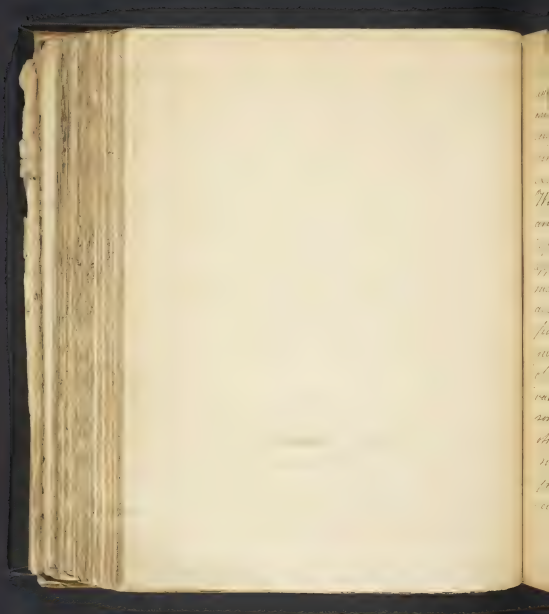
At the commencement it is generally thin becoming thicker as the disease advances; sometimes the matter is streaked with blood, this ought to be attended to, as it is a point of some importance in a part of the treatment of pneumonia.

The pain in this disease is felt in different parts of the thorax which has given rise to the varieties of pneumonia mentioned by authors. The disease is always seated, or at least begins, in some part of



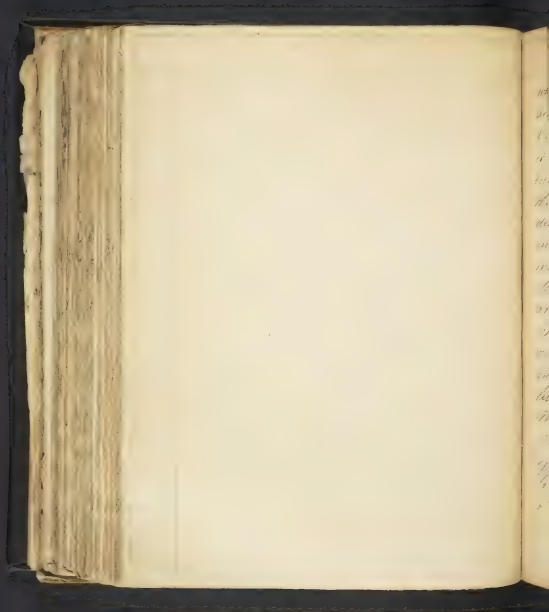
the pleura, which not only lines the cavity of the thorax, but invests the pericardium, forms the mediastinum, and covers the whole surface of the lungs. In considering the extent of this membrane we must rarely account for the pain not being confined to any particular part, as we sometimes find it affecting the breast just under the sternum, between the shoulders, on the back, but the place of all others the most frequent is the left side, sometimes higher or lower. But writers tell us, it is usually about the sixth or seventh ribs.

The pain is sometimes dull and obscure, at others more and pungent. It is much severer when it attacks the visceral part mentioned, Almost commonly it remains fixed in one point, but it occasionally shifts from its primary seat and attacks

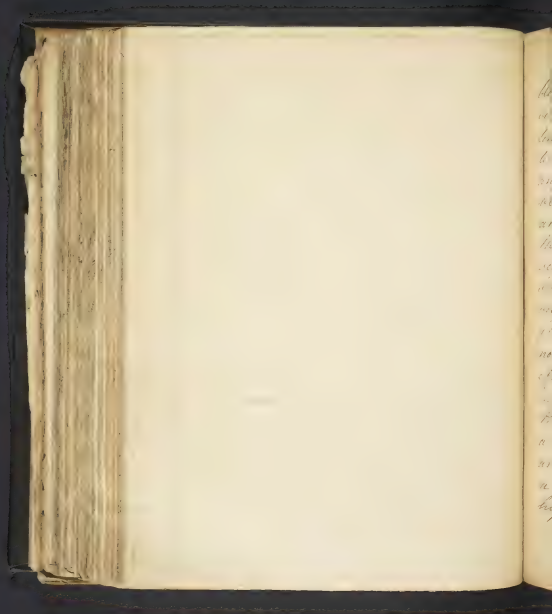


another part of the thorax. It may exist in one part of the pleura even if it may be communicated to some other parts, and thereby the membrane through its entire extent may become affected.

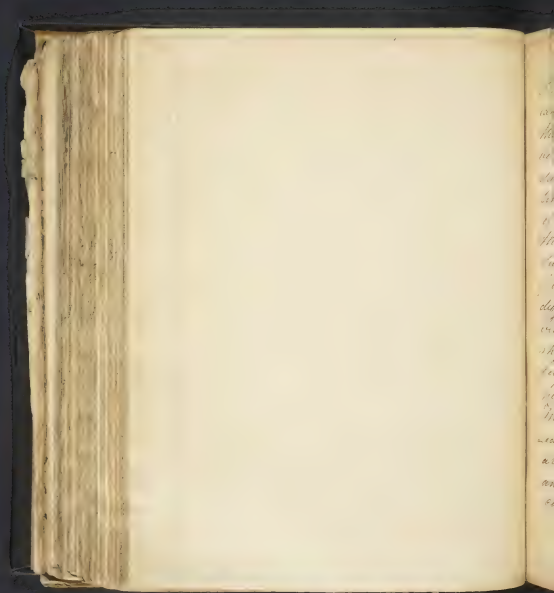
With respect to pneumonia, the causes are the same as with all other pulmonary inflammations. The most frequent is the application of cold air to the body giving a sudden check to perspiration thereby causing a considerable influx of blood to the pulmonary organs. It occurs most frequently in the winter and spring seasons of the year, and particularly under a variable and unsettled state of the weather. Sometimes there are but few cases, at others there may be many owing to sudden changes in the atmosphere from heat to cold. It attacks principally those of strong constitutions.



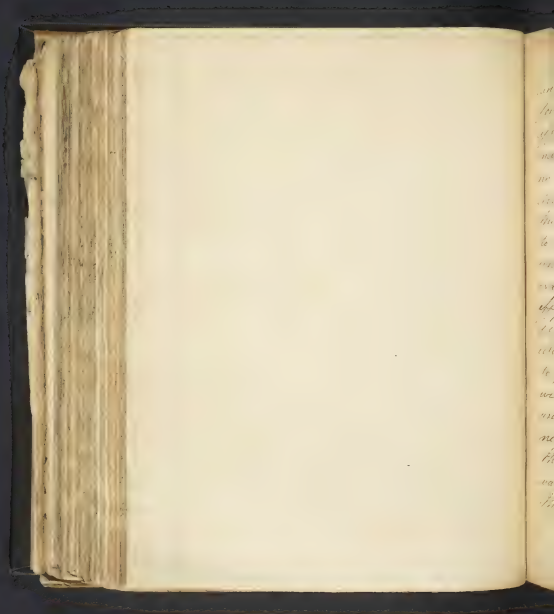
when there is a tendency to inflammatory
 diarrhoea, prevailing in the system.
 Certain other causes such as violent exercise,
 or morbid and powerful exertion of the
 lungs, producing an increased action on
 them have been known to occasion this
 disease. Such exertions as speaking, singing
 or instruments of music, singing &c may
 induce it also the breathing of certain
 deleterious vapours such as the fumes of
 arsenic, sulphur and the mineral acids &c
 The situation of the lungs is
 in a certain relations is divided
 into general and local. It differs but
 little from all other inflammations.
 The chief and only difference, arises
 from the nature and situation
 of the organ affected. The first thing
 to be considered in the management
 of pneumonia is general and local



Bleeding, which should in every instance be carried to such an extent as to occasion a tendency to syncope, or at least in a measure to relieve the symptoms such as, pain and distension. It is generally believed the blood ceases to flow from the patient's arm. The medical men agree as to this, regarding it as a most efficacious operation. We are directed to conduct freely, raising the voice in this war against that in which may prove largely and vicariously. There is no fact better ascertained than the efficacy of rational abstraction. I should be reducing inflammation. I understand that the cancer is not drawn from a vein actually cut, more as if it were, as twice the quantity is not removed from a small incision, a circumstance so highly important in practice that



it should never be forgotten. It is not an easy matter to give any, fixed rule, as to the extent to which venesection should be used in this disease much more depends on the character of the disease than from the extensive use of the lancet. In general I should in this case, & a robust and vigorous constitution with continued injury the pulse being strong and the respiration difficult, take twenty or thirty ounces of blood at the first bleeding and if this should not answer the purpose in a few hours theuration may be repeated perhaps nearly to the same extent. The small and repeated bleedings employed by some practitioners are always attended with inconvenience. They hamper and debilitate the patient without contributing proportionally to the



can. After the inflammation was continued
 for a few days the capillary vessels became
 affected and as these are in some degree
 independent of the heart and great arteries
 no detraction of blood from the general
 circulation will move the heart & remove
 them. This pathological view is proved
 to be correct and is illustrated by the
 consideration of the phlegmasia for
 example, in, interstices. ~~Whence~~ we cannot
 effect a cure without local depletion.
 For the purpose of emptying the cap-
 illary vessels. The same thing applies
 to pneumonia inflammation. But here
 we must not too hastily relinquish the
 use of the lancet. for veniflection is still
 necessary to relieve the lungs, provided
 the heart maintains its vigour, as a
 vast quantity of blood is constantly thrown
 through them and must aggravate.

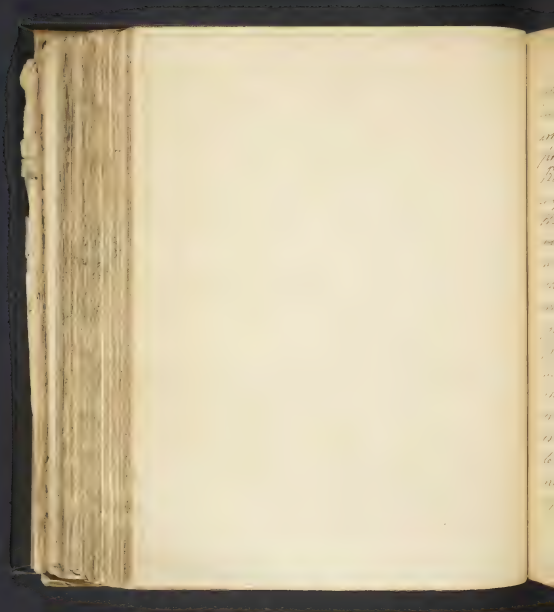


the inflammation. It is not, in fact, a very great
 distance from the sun: the rate at which it
 is sent out from the Sun is 18 miles a second. This
 distance is not considered as great.

It may be asserted that drawing blood
 from the site affected is not a very im-
 portant remedy, as the inflammation is
 so near the surface that it soon runs off.

The view we have in taking blood from
 the arm is to remove the vis a tergo
 which is accomplished equally well
 from the other arm. The blood is taken,
 and it is the same a vessel
 not equally near the center of circulation.

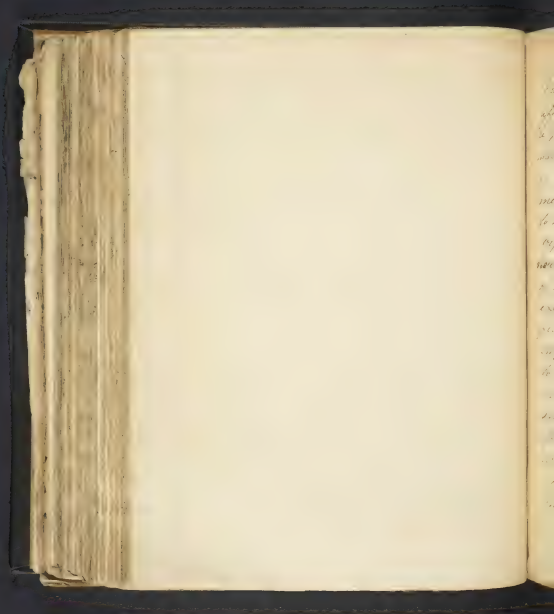
Below we have reduced the inflammation
 as far as possible by the general
 means we are next to resort to local
 means, and of these the most efficient
 are vesicatory. But some their utility is
 denied, but there is no doubt of their



places after the union of arterial action
 in the pulmonary vessels. It has proved they
 arrest the further progress of disease, and
 prove unimportant in extraordinary cases.
 But when they are applied too early that
 is before the influence of arterial action.
 They seem but to aggravate the symptoms
 which they are intended to relieve, and
 it appears to be a more great distress to
 the patient. The vessels should be large
 and a blood circulation over the rest of
 the body, or there is no gain, on the anterior
 part of the thorax. If the symptoms do
 not remain quiet this paper to support
 the discharge from the hindered part
 is to apply a suggestion of vessels which
 is impossible. It is necessary to apply them
 to some part of the thorax as little or
 no advantage will arise from their
 application to more distant parts. It never



may be proper to mention the advantage that
 it sometimes serves from its sedulating
 means of softening to the whole breast &
 spine. It may then be resorted to at any stage
 of the disease, and after general bleeding
 we will often find reason to be much pleased
 with their effect. Next I am to speak of
 those medicines which produce evacuations
 from the alimentary canal. These are either
 for or are an immediate assistance against
 in reducing the force of circulation
 or stimulating the exhalant vessels on
 the surface of the intestines and on
 the copious effusions of serum the
 vessels are relieved, as it is so much
 taken from the circulating mass. In
 this way we are told by Dr Cullen
 they relieve the liver, encourage excretion
 and render important service in the management
 of febrile and inflammatory cases.



hanging which is so venereal inflammation
 affections does not seem to require so important
 a purgative. But as in some cases does occasion
 malum. After the admission of a purge
 it would be prudent to use still a less
 medicine as jalap. it will be necessary
 to keep the bowels in a healthy condition
 by the use of castor oil or some of the
 neutral salts. By the continued use of
 the remedies already mentioned the
 excitement of the system will be sub-
 sequently removed. The next remedies to be
 employed are astringents which are necessary
 to produce perspiration. But experience
 shows that except in the forming
 stage they are almost useless if not hurt.
 But it is stated by many that copious
 diaphoresis at the commencement of the
 complaint in many instances has
 either arrested, or greatly mitigated



the action and restorative power. Yet it is
 frequently resorted to in arthritic action
 & treated with the same open excretors,
 as equalizing excitement and extinguishing
 the acute stage of pneumonic inflammation.
 Here the acrids, doublings or pills, very
 root seem to be very serviceable. As a
 diaphoretic it is distinguished by great
 certainty, and, permanency of operation
 as well as the inestimable property of
 reducing its effects without increasing
 much the force of the circulation or
 creating inflammation and swelling. In
 this action it is very well accorded to
 the common stage of this and many other
 inflammatory diseases. In the progress
 of the disease this class of remedies ~~is~~
 used as auxiliaries to venipuncture, as nitre
 and ipecacuanha, and the antimonials as
 soon as the cough, worms, iron and

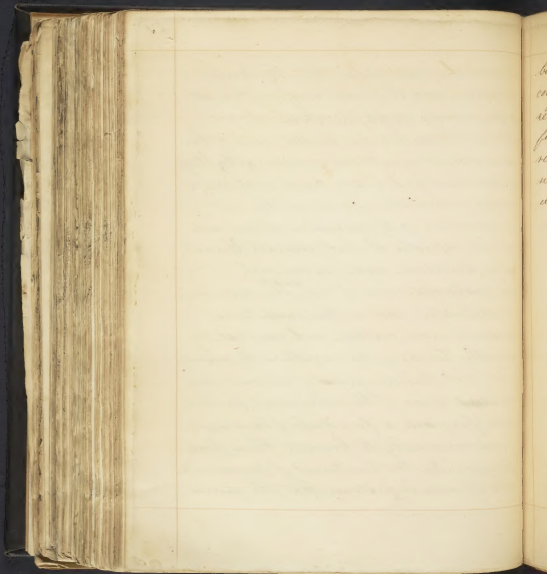


expectoration takes place, then the disease is broken and it becomes necessary to resort to the various cough mixtures—

When the disease has abated, some of the more violent symptoms remain, as tightness of the chest and a dry hard and sharp cough, when these continue the best prescription is Ipecacuanha, opium and calomel repeated at short intervals, this will allay irritation, and procure rest.

In protracted cases of this ^{kind}, the cure may be accelerated, and at the same time rendered more certain and complete, by slightly touching the mouth with mercury.

To effect this one grain of calomel may be added to one of the antimonial powders, and if requisite a few drops of laudanum given occasionally to prevent them from purging. In the treatment of pneumonia, it is of some importance that the disease



be completely cured. If any remnant of the
cough be left it facilitates or invites a
return and consumption not unfrequently
follows. Cough is much more certainly
removed, by pushing bloodletting to the
necessary extent than [&]any other remedy
we can use.

